

*Program: **Science Education***

*Program Contact and Title: **Don DeRosa**, Science Program Director*

*College/School Contact and Title: **SED Donna Lehr**, Associate Dean – Academic Affairs*

Learning Outcomes: B.S. Science Education

Students will:

1. Demonstrate adequate pedagogical content knowledge to earn initial content and grade level licensure: biology, chemistry, Earth science, or physics for grades 8–12 and general science for grades 5–8.
2. Design curricula, units, and lesson plans that support students of diverse cultural and linguistic backgrounds, strengths, and challenges
3. Identify and practice a variety of teaching methods and strategies associated with effective science education that promote inquiry and scientific ways of thinking and knowing
4. Integrate the three dimensions of the Next Generation Science Standards (NGSS) in theory and practice such that students in their classes are actively involved in the kinds of learning opportunities that facilitate (1) understanding of science concepts (2) student identities as learners of science and (3) appreciation of scientific practices and crosscutting concepts
5. Support a variety of teaching techniques that address a range of learners and reflect the three dimensions of the NGSS.